

THE WEATHER OF THE MONTH.

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CHARACTERISTICS OF THE WEATHER FOR FEBRUARY.

The weather of February, 1901, was characterized by low temperatures, great dryness over New England, the Middle States, and the Ohio Valley, high gales along the New England and middle Atlantic coasts, and the absence of severe snow-storms and cold waves.

A remarkable feature of the month was the persistence of an area of low pressure over New England and the North Atlantic.

PRESSURE.

The distribution of monthly mean pressure is graphically shown on Chart IV and the numerical values are given in Tables I and VI.

During the opening days of the month a number of lows appeared in the southwest, but with few exceptions they failed to reach New England as vigorous storms. From the 12th until the end of the month a few lows appeared north of Montana, but in no case did they reach the St. Lawrence Valley as storms of even moderate energy. From the 4th until the close of the month pressure was abnormally low over New England and the North Atlantic, the center of the depression appearing to oscillate back and forth in the neighborhood of Newfoundland. Monthly mean pressure at St. Johns was over half an inch below the normal; at Boston, 0.28 inch; New York, 0.22 inch, and Buffalo, 0.07 inch. Mean pressure from the Mississippi Valley westward was generally in excess of the normal by amounts ranging from 0.01 inch in eastern Oregon to a maximum of 0.13 inch in Wyoming. Not within the last thirty years has monthly mean pressure been so low over New England.

TEMPERATURE OF THE AIR.

The distribution of monthly mean surface temperature, as deduced from the records of about 1,000 stations, is shown on Chart VI.

Over the greater portion of the country temperature was markedly below the normal for the season. The region of greatest continuous cold was in the lower Lake region and in the upper Ohio Valley. While there were no marked cold waves, yet temperature was almost continuously below the seasonal average in the eastern parts of the country and from the Platte River in Nebraska southward to the Gulf. In the Northwest and generally west of the Rocky Mountains, temperature was above the seasonal average by amounts varying from 2° to 5° daily. Maximum temperatures of 90° were registered in the Rio Grande Valley, and of 80° and over in southern Florida, southern Louisiana, and quite generally throughout Texas, southwestern Arizona, and southern California. In the Lake region, also in northern New England and in northern Pennsylvania, the maximum temperature did not rise as high as 40° at any time during the month. Freezing temperatures were experienced in northern and central Florida and to the Gulf coast in Alabama and Mississippi. The lowest temperatures of the month were registered in Minnesota.

The average temperature for the several geographic districts and the departures from the normal values are shown in the following table:

Average temperatures and departures from the normal.

Districts.	Number of stations.	Average temperatures for the current month.	Departures for the current month.	Accumulated departures since January 1.	Average departures since January 1.
		°	°	°	°
New England	10	21.6	- 4.7	- 5.0	- 2.5
Middle Atlantic	12	28.0	- 6.5	- 5.4	- 2.7
South Atlantic	10	43.4	- 6.1	- 6.1	- 3.0
Florida Peninsula	7	57.8	- 5.3	- 5.8	- 2.9
East Gulf	7	49.0	- 5.5	- 4.1	- 2.0
West Gulf	7	48.9	- 2.6	+ 3.3	+ 1.6
Ohio Valley and Tennessee	12	31.0	- 7.1	- 5.3	- 2.6
Lower Lake	8	18.2	- 8.3	- 7.2	- 3.6
Upper Lake	9	14.5	- 4.6	- 1.7	- 0.8
North Dakota	8	8.4	+ 0.3	+ 6.8	+ 3.4
Upper Mississippi Valley	11	20.4	- 5.6	+ 0.6	+ 0.3
Missouri Valley	10	22.7	- 1.6	+ 7.4	+ 3.7
Northern Slope	7	19.3	- 1.7	+ 5.6	+ 2.8
Middle Slope	6	29.9	- 2.5	+ 2.9	+ 1.4
Southern Slope	6	38.9	- 2.3	+ 2.9	+ 1.4
Southern Plateau	15	42.0	+ 1.0	+ 9.1	+ 4.6
Middle Plateau	9	31.6	+ 2.8	+ 8.5	+ 4.2
Northern Plateau	10	30.5	+ 1.6	+ 5.6	+ 2.8
North Pacific	9	42.0	+ 1.4	+ 1.8	+ 0.9
Middle Pacific	5	50.4	+ 1.2	+ 1.5	+ 0.8
South Pacific	4	55.6	+ 2.1	+ 4.3	+ 2.2

In Canada.—Prof. R. F. Stupart says:

The mean temperature was below the average throughout Ontario, the more southern parts of the Province showing the largest departures, which were from 5° to 7°. In western Quebec the temperature was likewise below average, but in all other parts of the Dominion it was above average, and particularly so in eastern Nova Scotia and in Saskatchewan and northern Alberta. A positive departure of 7° was recorded at Sydney, N. S., 7° at Prince Albert, and 8° at Edmonton. In Manitoba and the Territories there were several fairly pronounced cold spells, but no temperature lower than -30° has been reported. In Ontario the steady cold weather was the chief characteristic of the month, but no unusually low temperature occurred except in the more northern districts from Nipissing westward to Port Arthur. In Quebec and the Maritime Provinces the month was characterized more especially by two cold, blustery periods, the first between the 5th and 7th and the second between the 12th and 14th.

PRECIPITATION.

The month was essentially one of light rainfall, except in southern Louisiana and along the Georgia and South Carolina coasts. Another notable exception may be found in Arizona and southern California, where the rains during the first part of the month were exceedingly heavy for that section. The total rainfall at Yuma was 3.01 inches, an amount nearly as large as the combined rainfall of the last three years. Rainfall was above the seasonal normal quite generally throughout the western Plateau region and along the north Pacific coast.

The snowfall of the month was not uniformly distributed. In some regions, as in Arizona, southern and central Utah, southern California, and the Adirondack region, including western New York, there was more snow than usual. Reports from Arizona show that the fall in that territory was greater than the combined snowfall of the two previous years. A heavy fall of snow was experienced in the Gulf and South Atlantic States on the night of the 22d and during the 23d. The snow was accompanied by high northwest winds and low temperatures, but nevertheless it remained on the ground but a short time. In the upper Missouri Valley, the Northwest, New England, and the southern and eastern portions of the Middle States the month was remarkably free from snow.

At the end of the month there was a covering of snow on the ground in northern New England and thence westward